

# THE FARMER & GARDENER

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TUESDAY, BALTIMORE: DECEMBER 19, 1887

## THE MORUS MULTICAULIS AND MORUS ALBA COMPARED.

A correspondent asks us this question:

What are the advantages, if any, of the variety  
of mulberry known as the *Morus Multicaulis*,  
over the White Italian mulberry?

OUR ANSWER IS THIS:

The *Morus Multicaulis* is not a variety, but a  
distinct species. The White Italian Mulberry  
requires four years growth before it can be safely  
fed from; six years before remunerating profits  
can be obtained from its foliage; and twenty be-  
fore it can be said to have attained its full  
growth.

The *Morus Multicaulis* tree can be fed from  
the first season without injury; the second season  
it will yield nearly as much foliage as at any sub-  
sequent period. It may be multiplied from cut-  
tings to an almost incalculable extent; every  
piece of wood with a single bud, being compe-  
tent to make a shrub from four to six feet high  
the first year; whereas, the White Italian mul-  
berry requires, as we have before stated, four  
years before it can be fed from, and even then, to  
nothing like the extent of the former.

The leaves of the *Morus Multicaulis*, are 3 or  
10 times as large as those of the White Italian mul-  
berry; equally as nutritious, and are eaten with equal,  
if not more avidity by the worms, will make  
silk fully as lustrous and elastic as those of the  
White Italian; and from the great size of the leaves  
of the former, it reduces the labor of gathering and  
feeding, 70, 80 or 90 per cent.; but for the sake of  
accuracy, we will say, 50 per cent. This fact  
will appear obvious to our correspondent, when  
we state a few others by way of illustration.

An acre in *Morus Multicaulis*, two years old,  
will yield by one-half more foliage than the same  
quantity of ground in *Morus Alba*, or White  
Italian mulberry, six years old: when a leaf of  
the former is gathered, food is provided for 9 or

10 worms, whereas a leaf of the latter, only suf-  
fices one worm: there is no more trouble in ga-  
thering the large leaves of the *Morus Multicaulis*  
than there is in those of the *Morus Alba*: the labor  
of feeding is the same, with this difference, that  
in feeding with one of its leaves, you accomo-  
date nine times the number; in the leaf of the *Mo-  
rus Multicaulis* there are but few stems, and scarce-  
ly any that are not eatable by the worm: in that of  
the *Morus Alba*, the stems and uneatable fibres,  
comprise fully one-third of its weight, all which  
is waste and loss.

In feeding with the leaves of the *Morus Mul-  
ticaulis*, the residuum being but little or none,  
there is no vegetable offal remaining, to become  
offensive by fermentation, and hence, a greatly  
reduced quantity of labor is necessary to keep  
the worms clean: In feeding with the White  
Italian mulberry, a large amount of stems and  
coarse fibres are left on the shelves, which if not  
speedily removed, ferment, become offensive, and  
consequently produce disease in the worms.

These are a few of our reasons for preferring  
the *Morus Multicaulis* to all other leaves, and  
we hope by this time that our correspondent is  
satisfied that they are such as ought to give to  
that tree a preference over all others for feeding  
silk worms, where profit is desirable, or the  
health of the worms are considered an object of  
moment.

## COAL ASHES AS A MANURE.

We are aware that many persons entertain the  
belief that coal ashes have little or no virtue as  
manure, and hence it is that but little use are  
made of them in this country for agricultural  
purposes; but when it is considered that coal,  
from which they are produced by incineration,  
(with, perhaps, the exception of anthracite, and  
we have never seen any good reason for the ex-  
ception) is of vegetable production, we can see  
no just ground for denying to them the prop-  
ties of manure. In appearance and smell, they  
bear a close analogy to wood ashes, and when  
submitted to the test of the touch when wet, they  
possess almost an equal degree of causticity; so  
also when tasted, they are nearly as acrid. Coin-  
ciding in all these characteristic traits, common

sense would say that they cannot be without the  
possession of their virtues, which render wood  
ashes a valuable agent in the improvement of  
soils. If they possessed no other specific vir-  
tues, the property they do possess, of warming,  
loosening and intimately dividing, or disintegrate-  
ting the particles of tenacious clays should  
render them, in the estimation of all judicious  
farmers, a valuable means of improvement; but  
their adaptation to the melioration of soils, is not  
peculiar to that description of lands, as their  
good effects have been equally visible when ap-  
plied to sands, loams, and marshy grounds, in  
Europe, as well as in this country. As top  
dressings for turnip lands, for meadows, whether  
situated on elevated or low grounds, their bene-  
ficial effects have been universally acknowledged  
wherever applied. If they be not quite so po-  
tent, or durable, in their effects as wood ashes,  
they have nevertheless proved of immense value  
wherever used. In England they form a compo-  
nent part of almost every compost, and are often  
used alone; and whenever there are found a-  
mongst them any considerable portion of uncon-  
sumed coal, to every cart load of such ashes, 3  
bushels of fresh unslaked lime is added, covering  
the whole up in a heap for about twelve hours,  
till the lime be entirely slaked, when they are in-  
timately incorporated together, by turning the  
whole over two or three times, by which time  
the cinders or unburnt coal will be reduced to as  
fine a powder as the lime itself. When reduced  
to this state, they are to be applied as are wood  
ashes, either by admixing them with the soil, or  
by top dressing the land with them; a hundred  
or a hundred and fifty bushels to the acre being  
a full dose. With respect to the anthracite coal  
ashes, we will remark, that the gardens in Pote-  
sville, Pennsylvania, we are assured, bear the  
strongest and most gratifying evidences of their  
fertilizing effects, they being there a favorite ma-  
nure.

We have thus felt it to be our duty to call the  
attention of agriculturists to these facts, because  
from the increasing consumption of coal in all  
our larger cities as fuel, the time is not far dis-  
tant when they will form a very important means  
of fertilizing the lands of farmers in their respec-

five vicinities. One of our very best farmers in this neighbourhood assured us some months since, that, from a trial he had made of them, he was satisfied they were a most excellent and effective manure; that they had greatly improved the texture, and increased the productive ability of the soil on which he had spread them.

#### PROSPECT OF THE SILK CULTURE IN MASSACHUSETTS.

A correspondent of the Northampton Courier, in speaking of a visit of a gentleman of Boston to Hampshire county, observes that he expressed his surprise "to find so much had been done in that county, in the culture of mulberry, the manufacture of silk, the preparation for feeding more worms, and the making more raw silk." He further states, that in Northampton, there are *two silk factories in successful and profitable operation*, and although these in the outset were subjected to the necessity of employing raw hands and suffered loss by waste, that by changing the machinery and introducing other substitutes, the difficulty was soon obviated, and the more especially as by the supervision of the enterprising, persevering and never despairing head of the whole establishment, he was enabled to correct the incipient errors, and has now got the establishment on a firm basis of enviable prosperity.

The advice contained in the closing paragraph of the article in question, is so wholesome that we shall copy it entire. He says:

"Our advice is, not to *despond* if in the first trial you do not succeed, but *try again and again*.—Only be patient and persevering, and you will most assuredly succeed. Obtain a skilful reeler to *instruct* your family, and the difficulty will be overcome at once, and when you see the minute and brilliant thread of the cocoon accumulating and maturing into handsome skeins of reeled silk, and find an article adapted to the purpose of being made into beautiful sewing silk, or durable articles of dress, you will have cause to wonder that you ever had a doubt of success."

"Our advice is, do not *despond*, if on the first trial you do not succeed!" There is true philosophy in these words; they strike at the very foundation of human hope, and human enterprise. Had the venerated father of our liberties, the peerless Washington, permitted his want of success, in the early period of our revolution, to make him *despond*,—had he suffered the various defeats to which he and his iron-hearted followers were subjected, to lessen his patriotic exertions—had he allowed the sufferings of that gallant band

of spirits who battled for our liberties, when retreating through snow, half clad and worse fed, to have paralyzed his efforts—had he, we say, permitted any or all of these untoward circumstances, to make him *despond*, what, we would ask, would have been the condition of our land at this day? The probability is, that the shackles which then oppressed and bound us to the mother country, would have been drawn still tighter, and at this day, we might have been still the colonies of Britain. But his great soul was not to be thus cast down—the patriotism of his companions in arms were too ardent to be overcome by difficulties, great and appalling as they were, and *he* and *they* increased in ardor and determination in proportion to the degrees of danger and privation with which they were environed, and hence a thrice glorious triumph crowned their perseverance.

Suppose too, the mighty mind of *Fulton* had *desponded* at the cold and almost heartless indifference with which his countrymen first treated his discovery in steam, the world at this day might have been without those incalculable advantages resulting from steam navigation. He too, however, *desponded not*; but proved himself equal to the exigencies of the occasion, and has left a monument of his genius behind him as imperishable as the pyramids of Egypt. Why then should silk culturists "*despond*"? Those embarrassments which always beset the pathway of new beginners, have, in a great measure, been overcome by our sagacious and enterprising brethren of the north and east, from whose lights, knowledge will be reflected to illumine all followers in their trackway. We Americans too, have an advantage with which the early European culturists were not blessed. They have acclimated among them the *morus multicaulis*, or *many stalked mulberry*, which is not only one of the very best variety, but one which will enable them to *feed worms the first year*. It was not the case when Italy and France and the other European silk culturists commenced their labors. They had to wait from four to six years for the slow growth of the Italian mulberry, before they could reap any advantage from the foliage of the trees; under all this startling sum of difficulty they did not however falter in their course; they beheld in the distance the ultimate reward of their labours, and having commenced, under the animating watch-word, "*onward*," they persevered to the end,—till they finally triumphed, and successfully established this lucrative branch of husbandry in their respective countries. Let then, we say

to every American agriculturist, *their success* stimulate each and all of us to exertions worthy of the enterprise, and by *our success*, add, in twenty years, as many millions of dollars of exports to the surplus products of our country!

#### AN EXCELLENT RECOMMENDATION.

The following recommendation, which we find in the last message of his excellency, Joseph Riker, of the State of Pennsylvania, manifests a lively interest in the welfare of the agricultural community, and we trust that the legislature will meet it in a spirit which will ensure its being fully carried out. It is to be hoped also, that the executives of such of the other states as have not granted encouragement to the culture commended to protection, will feel themselves called upon, by a sense of enlightened policy, to urge similar measures upon the adoption of the legislatures of the states over which they respectively preside. Attention to the interests of husbandry by rulers, never fails to excite a salutary spirit in the cultivators of the soil, the influence and promptings of which most happily tend to the advancement of private welfare, as well as to the enlargement of the resources of states.

"The culture of the *mulberry* and the raising of *silk*, are now known to be well adapted to the soil and climate of this State. The care of the silk worm is also suited to the other employments of the mass of our population, and the manufacture of the article will add greatly to our wealth. The Legislature endeavoured to promote it, by the act of 1832, authorising the establishment of one silk company in each county. But the means adopted, seem not to have produced the desired result. A company has been chartered in each of the counties of Beaver, Chester, Cumberland, Lancaster, Lebanon and Philadelphia, but without much apparent success. Nor is it perhaps desirable that they should succeed. The silk business will undoubtedly become one of first rate importance among us, and will probably be the sooner fairly established if left to the unrestrained exercise of private enterprise, properly encouraged by the Legislature. With this view, I would recommend that a small premium be offered by the State for a limited time, on specified quantities of the article, when the production of our own soil and industry."

#### WEIGHING OF LIVE STOCK.

We agree with the editors of the "*Examiner*" that some such remedy as the one proposed in the annexed memorial should be devised, and for ourself we cannot conceive how any victualer can possibly have any objection to the prayer being granted. Honesty and fair dealing between man and man require, that while the *seller* gets paid fully for his stock, the *buyer* should be made



pay for no more than he gets. The contemplated measure will accurately ascertain the actual live weight of animals, leaving the tare to be regulated by usage, and such mode will most certainly be much fairer than the present loose one of fixing an arbitrary estimate between the parties, which may or may not be correct:

#### LIVE STOCK.

The subjoined memorial is in circulation in this county and in Montgomery. Those who drive cattle to Baltimore are said to be subjected to much inconvenience and loss in consequence of the want of some such regulation as that prayed, and which exists in other meat markets of the Union. Any one who feels interested that the Legislature should take some action on the subject, can obtain signatures to copies of the memorial. If the representations which are made concerning this matter are true, it is of great importance that some such remedy as that which is suggested, should be devised. We would respectfully urge it upon the attention of the farmers and graziers of this county:

To the Honorable,

The General Assembly of Maryland:

The memorial of the undersigned, farmers, graziers and others, citizens of Frederick county, respectfully sheweth, that the agricultural interests of the state suffer materially for want of an officer properly constituted and appointed to weigh Live Stock, particularly neat cattle, in the meat market of the city of Baltimore.

Your memorialists represent that the loose custom of averaging Live Stock on sale, is the cause of much complaint, and frequently subjects the inexperienced and industrious to the most shameful impositions.

Wherefore, we do pray your honorable body to pass a law, creating and authorising the appointment of an officer in the city of Baltimore, for the purpose of weighing Live Stock on sale, under such restrictions and with such powers as may be deemed sufficient to protect the interest of all citizens, particularly those of the agriculturist. As in duty bound they will ever pray.

#### BADEN CORN.

We are indebted to the Hon. Henry L. Ellsworth, of the Patent office, for the following communications relative to the above corn, which has gained so much celebrity within the last few years. While we publish them with sincere pleasure, we take occasion to say, that the public are greatly indebted to the praiseworthy exertions of Mr. Ellsworth for bringing the merits of this profitable variety of corn to the notice of the agriculturist. For ourselves we feel the more indebted to this gentleman, because from the nature of his laborious official duties, his exertions in behalf of the husbandry of the country, which have been extensively exerted, must be a heavy tax upon those hours which should be devoted to ease in the bosom of his family. Would that the halls

of Congress had many such gentlemen in them; we might then hope soon to see the foreign shipments of grain dispensed with.

PATENT OFFICE, Dec. 12, 1837.

Dear Sir—I have received many enquiries respecting the culture of "Baden Corn," and addressed a letter to Mr. Baden on the subject. I take the liberty of enclosing his letter for publication in your valuable paper.

Mr. Baden's experiments this season show that his own is earlier than many other kinds. I have distributed the last year a great number of parcels of the Baden corn—that which has been planted in latitude not exceeding 40 or 45 North, has succeeded admirably. It will soon be acclimated in the higher latitudes. Over 100 bushels has been raised per acre on the rich lands of the West and South, without any manure.

Yours, respectfully,

H. L. ELLSWORTH.

Mr. ROBERTS,

Editor American Farmer, Baltimore.

To Hon. HENRY L. ELLSWORTH,  
Washington City.

NEAR NOTTINGHAM,  
Prince George's County, Maryland,  
November 4th, 1837.

Dear Sir—Agreeably to promise I now write you a few lines to inform you that within the last two years (and never before) there has been a report in circulation that my corn was a latter kind. However, for the satisfaction of my friends I have made an experiment this year, which I hope will satisfy every one upon that point. I planted a lot of six acres and a half, as near as I could judge (by stepping) of this kind of corn, the 20th day of May last—my book is now before me. I cannot be mistaken in the date, which is more than a month later than the common time of many persons planting in this neighborhood. I gave it no extra management to hurry its growth, and determined to give it only the common routine of work that I generally give my corn. It is now perfectly ripe and hard, and has been for some time, and no frost could do it any injury in any way, and I believe it will yield as much good sound corn to the acre as any that was planted in the neighborhood any time in April upon land of the same quality. This evidently shows that my corn is a forward kind, and will come to maturity as soon as any other. By the first opportunity I will send you a few stalks of this corn that was planted the 20th of May, and also some that was planted the 1st day of May, with the corn on them, as it grew in both the lot and field, and none with less than four, and some with seven and eight good ears on a stalk—then I will leave you to judge which of them is the better. As soon as it is sufficiently dry to shell and put up, I shall send you twenty or thirty bushels of as good seed corn as you have ever seen. I have not long since discovered something in this corn, which convinces me that I can still make a great improvement on it, by adding much to the quantity and quality of the grain on each stalk. I am now persevering in my efforts, and intend to raise a large crop every year in its purity, to supply all who may apply for it for seed. I have been

frequently requested to give a statement of my mode of planting and cultivating corn. As the planting and cultivating of corn is so generally understood, I deem it almost unnecessary to say any thing upon the subject; but to satisfy the wishes of such friends as think they can profit by it, I willingly give it. I first pulverize my land well by good ploughing, and lay it off five feet apart each way. By the first of May, or a few days sooner if the weather is warm, I begin planting—roll my corn in plaister and drop three grains in each hill. As soon as I have done planting, I set to ploughing one row and leave two, and harrow over the field in this way as soon as possible to prevent the corn from washing up in case of heavy rain, which sometimes happens. Then I plough the other two rows at my leisure—as soon as the corn is generally up, I go over and replant all the missing hills; when the corn shows well along the rows to see how to plough, perhaps when it is 6 inches high or thereabout, I then commence ploughing the second time. The best ploughman commences siding with the bar side of his plough to the corn, and goes as close to it as he can, and throws the dirt from it; the other ploughman follows on, to plough up the middle of the rows. Their first furrows throw back and fill up the side furrow, which leaves a soft fresh bed for the young roots to run in. As soon as the field is ploughed in this way I put the hoes in to clean out the hills and to place a little soft dirt around the corn, and at the same time to thin it so as to leave two of the best stalks in each hill. The third time of ploughing I turn the mould board to the corn and go near enough to throw the soft dirt around the stalks—that will answer the purpose of hilling and also to cover and smother the grass that may be springing up on the hills. The fourth time of ploughing over the field I don't go so near the corn, nor quite as deep (in particular the first furrow) for fear of cutting the roots: and my wish is never to let it exceed ten days between the times of ploughing over the field. By this mode of working, the corn has always a soft fresh bed to grow in, and always has a healthy thriving appearance, and I don't remember ploughing it oftener than four times, and if the weather is seasonable, I never miss raising a good crop. I never let the suckers exceed a foot or 18 inches high, before I pull them off, the strength will then run in the stalks, which will cause them to grow larger and they will produce more and better ears on a stalk: the grains also will be larger and heavier. I have said I planted my corn 5 feet apart each way. By experience I have found it to be near enough for our lands. Four feet apart each way, and two stalks in each hill is near enough for the richest land with this kind of corn. I like to work my field over the first time after the corn comes up, and the fourth time when I am laying it by, with the cultivators—but I make no use of them in wet seasons.

Yours, respectfully,

THOS. N. BADEN.

P. S. I can ship any seed that may be ordered each week to Baltimore, if a few days are excepted when navigation is interrupted by the ice.

The people of the United States consume annually, it is estimated, about 1,300,000 barrels of flour.

## SUGAR BEET SEED.

We comply with the utmost cheerfulness with the request of the public spirited and truly patriotic gentleman, whose name is attached to the subjoined advertisement, and commend not only its perusal to our agricultural readers, but hope that they will avail themselves of his patriotic effort to disseminate the genuine seed of this excellent root throughout the country. It is thrice honorable to this good man, that in the evening of his days, surrounded by every thing, as he is, that can lend a charm to life, he is devoting himself with zealously to the procurement and introduction of the most valuable European seeds into the land of his adoption without the slightest prospect of profit, asking nothing for them but prime cost and charges. We were gratified, on reading the advertisement, to find it a very sound condensed essay on the virtues of the beet, and have no doubt it will be read with interest and profit. In a conversation some days since with one, whom we esteem as one of the best farmers in the country, and who has raised the present year both the *sugar beet* and *mangel wurzel*, he assured us, that he preferred the former to the latter, inasmuch as he believed it contained *much more nutritious matter*, would bear its leaves being stripped equally as well, was equally productive, and was eaten as readily by his stock; and from experience we can say, that as a *table beet* it is far preferable to the best *blood red*, possessing as it does infinitely more sweetness, and being entirely clear of that *earthy taste*, which renders the latter root disagreeable to many palates.

## SUGAR BEET SEED.

For sale, 250 lbs., price seventy-five cents per lb., and in bags of six pounds twelve ounces, or thirteen pounds eight ounces; the quantities are chosen to accommodate payments and remittances by mail, the smallest quantity amounting to five, and the largest to ten dollars.

The vegetative freshness of this seed has been ascertained by planting 24 of the burs in which the individual seeds are contained; twenty-two of these burs put out, some one and others more plants.

The Sugar Beet as fall and winter food for cattle of all kinds, merits the attention of farmers in every part of the Union. Compared with turnips it is more expensive in respect to land, as the beet occupies the soil all the season, and turnips require only a few of the fall months; the superior quality and greater certainty of a good crop, leaves the comparative advantage in favor of the beet, and the culture does not interfere with raising turnips; in a good system of farming both should be attended to, because, the wintering stock entirely on straw, hay, and corn, is expensive, and cattle do not thrive so well as when a portion of their feed is Turnips, Beet, Cabbage, or something

green and juicy. The cultivation of most green crops greatly refreshes and improves all soils. Beets and Turnips thrive on light lands, and that species of soil frequently possesses great power in giving vitality to seed; the sprout or "braird" is very vigorous and fresh, but there is a deficiency in the nutritive principle that is required to bring forward a profitable crop of Wheat, Oats, Barley, &c. but they acquire this by being frequently put under green crops; indeed keeping the surface as much covered with foliage, such as clover, turnips, beets, potatoes, &c. under most circumstances will favour the improvement of land, and their direct tendency being to produce manure, the farm is put in good condition; seasons may be a little too dry, or too wet, cold or hot, still the green crops and manure insure to the farmer an abundant harvest.

The length of this advertisement is not in keeping with the sale of a small quantity of seed; the object is to present to the farmers a subject that merits their attention, with a view to enable us to raise our own food from our own land. So long as we are dependant on foreign countries, and foreign labour for food and clothing, it will be a hard task to keep money and public affairs in a wholesome condition.

Our ambition ought to extend beyond the absolute necessities; there can be no good reason for farmers not having about their houses, a few soft-shelled Walnuts, [Juglans,] Maron Chestnuts, [Tagus Castanea,] Grapes, &c. In the case of walnuts all that has to be done, buy a few that are fresh, and these can be had at the fruit stores, put the nuts about an inch under ground at the commencement of or during the winter, on the place which they are to occupy, and protect the tree. In ten or twelve years it will commence bearing; thus farmers will ornament their places and increase their wealth and comfort.

JAMES RONALDSON,

No. 200 S. Ninth st. Philada.

Letters and remittances, post paid, will be promptly attended to.

P. S. Editors who take an interest in agricultural affairs, will confer a favor on the advertiser by giving the preceding a place in their papers.

We have been furnished with the weights of the following individuals of R. W. Scott's stock of Durham cattle. Lady Gray, six years old, 1500 pounds. Bustamante, one year old, 1200 pounds. Ruby, one year old, 1140 pounds.—Frederic, two years old, 1680 pounds. None of these are fat but Ruby. We will publish the pedigrees of Mr. Scott's stock next week.

Frank. Far.

## EXTRAORDINARY AGRICULTURAL PRODUCTS.

—The following have been sent us: Two large heads of cabbage, one weighing 25½ lbs. by Jas. Guthrie of Shelby. Two Sugar Beets, each 9½ lbs. by Jas. Hackley of Shelby. Texas or Mexico Corn, each grain covered with a husk, by Riden Hart of Scott. Queen Apple, 1 lb. 3 oz. by Aaron Miller, Franklin. Double (or twin) Apple, by Ben Ellis, Franklin.—Franklin Farmer.

The crop of apples in Canada has been unusually abundant this season.

[From the Genesee Farmer.]

## COMPARATIVE VALUE OF THE HORSE AND OX FOR FARM LABOR.

It has long been our impression that farmers made a serious mistake in their domestic economy, by substituting to so great an extent, horses for oxen, in performing the labor of their farms. We admit that a span of horses will do more in a given time than oxen; that to most farmers it is more pleasurable driving horses than oxen; and that for some kinds of business, such as carrying to market farm produce, the aid of horses is indispensable; yet after these admissions we still ask, is such a general substitution profitable?—for this is the standard by which a farmer should regulate his domestic and farming concerns. We think it is not, and shall give some reasons for our belief.

That a span of horses fit for labor, cost much more than cattle in the outset none will deny. When good oxen are worth eighty or eighty-five dollars a yoke, a span of horses at the same comparative rate of value will cost from \$180 to \$300. The expense of keeping a span of horses throughout the year in a condition fit for labor is much greater than that of keeping oxen in a like state; perhaps if the expense is estimated at one third more annually it would not be below the truth. The expenditure required to fit out a span of horses, harness, &c. far exceeds that necessary for cattle, certainly four or five times as much. The danger of disabling or killing a horse is greater than that of injuring an ox. A horse is by far the most delicate animal; slender limbed, more liable to disease, and when attacked more liable to go down than the ox. If any one doubts this, let him endeavor to effect an insurance on a span of horses or a yoke of cattle, and see what the cool calculators of chances think of the difference. And further if an accident does happen to a horse that renders him unfit for labor, he is utterly worthless, and the only alternative is to kill him at once. It is true Gen. Gaines testified from his own experience in the Florida campaign, that horse meat was no despicable substitute for beef; yet we think few of our farmers would highly relish a horse stake, even if taken from a few year old. On the contrary, if an accident renders an ox unfit for labor, it rarely materially lessens his value for fattening; and all that is necessary is to convert him into beef, and you obtain his original worth, with the pay for expense and trouble of feeding. On this point, the warmest advocate for horses' labor cannot fail to perceive the immense advantage there is on the side of the ox.

We admitted in the beginning of this article, that horses will do more work on a farm than oxen; but the difference is not near so great as many farmers imagine. If the ox is slower, he is more sure, can be more quickly brought to his work, and does not hinder by casting his shoes, or breaking his traces. There is more difference in cattle so far as regards capacity for travel and working quick than there is among horses. A well fed span of horses, where the work is not beyond their strength, will do about as much as another; while among oxen, you may select the Devon whose walk will nearly equal that of the horse, or some of the commoner varieties, where



you are puzzled to tell whether the animal is moving or otherwise. As a general rule, it may fairly be estimated, that a good yoke of cattle, will on the farm, do about two-thirds the work of a span of horses.

In forming our estimate of their comparative value to the farmer, the difference in the expense of raising must not be forgotten. This of course will vary according to the different methods adopted; but one of the best statements, is to be found in one of the reports of an 'eastern agricultural society, carrying out each item of expense incurred in rearing and keeping until their labor would pay their way, which in the horse was estimated at four, and in the ox at three years of age. The cost of raising a horse till four years old was found to be \$94.26. The expense of a yoke of cattle at the same age, \$65.13. It is true the horse when raised may be worth more than the oxen, but we think when the average quality and value of our horses are taken into consideration, there is quite as much probability that the oxen will be worth eighty dollars, as that the horse would reach that sum. Admitting they were each worth that sum, the man who has raised the oxen has made fourteen dollars eighty-seven cents; while the man who has raised the horse has lost fourteen dollars thirty-six cents by the operation.

The same general rule however will hold good in the raising of animals that experience has proved applicable to the raising of crops on a farm;—never to run into one kind to the exclusion of all the rest. Horses, cattle, and sheep, are all necessary to the farmer; and he who thinks to make money by excluding any of these from his farm, will most likely in the end find himself mistaken in his calculations. The point necessary to ascertain is, what proportion of each will under the circumstances of the farm be the most profitable and to act accordingly. The comparative scarcity of cattle, and the multitude of inferior horses, shows that we have erred on the side of horses, to the neglect of cattle, and the prices not less than numbers demonstrate this fact. Animals which are so useful in every respect as cattle or sheep, are rarely found multiplying in any disproportionate degree. When they are not wanted on the farm, or cease to be profitable for their products, or when the dairy or the fleece cease to be an object, the flocks or the herds can be sent to the slaughter house with no loss to the producer; while, as thousands at the present day find to their cost, they have overstocked their farms with horses which are not wanted for labor, and of which they cannot dispose, except at serious sacrifices.

In Belgium horses are extensively used on farms, but rarely more than one span is kept; as the rule is there to make one span perform the labor of ploughing, &c. for forty-five or fifty acres, and the horses are kept in a state to perform this labor accordingly. In England cattle are most commonly used, and for farm purposes the Devon oxen have a decided preference. They walk fast, are good at enduring fatigue, and in general are less liable to suffer from heat, than other breeds. In New England the ox and the cart still retains the preference on the farm, to the more complicated and expensive apparatus of horses, harness and wagon. In New York we find the horse useful,

and in our grain raising districts indispensable; but the fashion of these districts is too implicitly followed elsewhere; and on farms where a yoke of cattle would be sufficient for every valuable purpose, they are crowded off to make way for a horde of unruly, worthless horses, the plague of their owner's neighbors, and a moth to destroy any farmer's prosperity.

[From the Farmers' Register.]

#### ACCOUNT OF THE SOILS AND AGRICULTURE OF WESTERN NEW YORK.

During a recent visit into the interior of New York, I had an opportunity of forming some idea of the extent and fertility, the agricultural products and resources, of that interesting portion of our country. As there is a natural desire among the intelligent part of the agricultural community, to be informed of the comparative advantages and the practices of other states, I venture to submit the results of my observations to the readers of the Farmers' Register.

The western part of New York is undoubtedly one of the most fertile and productive districts in the United States. From Utica to Niagara, a distance of two hundred miles, the soil is capable, with some inconsiderable exceptions, of sustaining a population as dense as that which exists in any part of the old world. Even now the number of inhabitants is very great, notwithstanding the constant tide of emigration to the new and fertile regions of the west; and this cause alone will probably prevent it from reaching its maximum during the present century. With unexampled facilities for the transportation of produce to market, and with abundant means at hand for the continual improvement of the soil, nothing is wanting but intelligence and stability to make a garden spot of this extensive region. The climate alone may be considered as unfriendly: for winter intrudes upon nearly half the year, which causes a heavy draught on the labor of the country during the season of vegetation.

In estimating the agricultural merits of a country, its natural structure may be regarded as an important object of consideration. I shall, therefore, introduce such remarks on this subject as would probably occur to any person whose attention might be directed to it. I regret, however, that I was not able to have access to the report of the legislature, that I might avoid those errors into which a traveler may inadvertently fall, from the slight examination it is in his power to make. But I trust that if my description shall be thought erroneous in some of the details, it will yet be found sufficiently accurate to answer the purpose for which it is introduced.

A traveller then would naturally lay off the western part of New York into three divisions: 1, from Lake Ontario to the Gravel Ridge, commonly called the ridge road; 2, from the ridge road to the mountain ridge; and 3, from the mountain ridge to the Pennsylvania line. Upon each of these divisions I will offer some remarks.

The tract of country lying on the shore of lake Ontario, and extending to the ridge road, may be from five to ten miles in width. It is but slightly elevated above the level of the lake, and so perfectly flat and unbroken, that the motion of the

streams is sluggish in the extreme. The soil, however, which is a black sandy loam, does not appear to be retentive of moisture: and having a slight admixture of lime in its composition, is very productive of corn and oats; when it can be successfully drained; and moderately so of wheat. Its low situation must render it injurious to health.

The ridge, which constitutes the southern boundary of this division, presents a curious and remarkable feature; and indeed is perfectly anomalous, as far as my information extends, with the exception of a similar embankment on the south side of Lake Erie. It is apparently elevated about twenty-five or thirty feet above the level of the land on the north, and something less above that on the southern side. It is almost wholly composed of sand and gravel. At one place where there had been an excavation for the purpose of getting materials to conduct a road, there was only a small portion of sand on the surface. The pebbles, which are smooth and formed of red sand stone, were without a particle of other matter among them, except a deposit of lime, which served to cement them slightly together. This fact alone shows the presence of lime in the adjacent soils. It was no doubt held in solution by the waters, which once covered the country, and deposited equally over every part. To what cause this natural embankment is owing, it may be difficult to explain. It will be perceived from the description, that it is of diluvial formation; and many persons have supposed that it constituted the former boundary of the lake. To this theory, however, there are several objections. One is, the absence of a corresponding formation on the northern shores of the lake; another is, that the bank is considerably elevated above the land on its southern border; and a third one is, that near the western extremity, there is an entire interruption for several miles, where no traces can be found. Towards the western termination of the eastern portion, the ridge deflects suddenly to the south, and shortly becomes merged in the general surface. Travelling thence to the west, it is met with again at the distance of six miles, when the ascent to the summit is somewhat abrupt. That its existence, however, was connected with the vast bodies of water to the north, cannot be questioned. At a distant era, and during the convulsive throes of nature, we may suppose that a tremendous wave or succession of waves rolled in from the north, sweeping the earth as they advanced, and that they expended their force at this point. But to whatever cause its origin may be referred, it forms during its whole length a natural road, not to be surpassed in excellence, nor equalled in durability, by the most approved work of artificial construction. Its summit is not more than sufficiently broad for a road of convenient width, and generally speaking, the surface is equally smooth in winter and summer. Along such a great thoroughfare, it may readily be supposed that the population is very numerous. Accordingly each side presents somewhat the appearance of a continuous village. The houses are generally on the declivities, and so near the road as only to allow of yards of the most contracted dimensions.

The next division, embraced between the ridge road and the mountain ridge, presents a more varied surface than the one I have just described.

In some parts it is quite broken, with sandy and gravelly hills of diluvial formations running from north to south, and plainly marking the direction of the current which once swept over it. For the most part, however, it is a beautiful undulating country, with a soil of good texture, sometimes rather heavy; impregnated with lime, but not belonging to the lime-stone formation. The red sand-stone forms the basis of this region as well as of the other. A great number of granite boulders are scattered over the surface, which, from the total abstinence of such original formations in the western part of the state, were evidently brought from beyond the lakes. Broken limestone rocks are also to be met with. It is through this tract that the Erie canal is taken for a considerable distance; and the benefits, which have resulted from that great public work are no where so strikingly displayed. Villages have sprung up along the whole line, as if by enchantment and the industry of men is developed in a thousand ways.

There are, however, some portions of this district that are very imperfectly drained—large swamps of fertile land, yet remaining in a state of nature. The chief obstacle to effectual draining is the gravel ridge, through which the streams have, in some instances, found a difficulty in effecting a passage. It was highly interesting to witness the abortive efforts of one of these in particular, repeatedly made during a distance of eight miles. Approaching the embankment in the first instance rather obliquely, it was repelled, after having made a considerable excavation into its side, when it flowed back as if to acquire fresh strength to return to the attack. This was renewed at various intervals, with the same partial success; but at length the object was achieved, and it pursued its sluggish course to the lake. At some points it has been found necessary to open a passage through the ridge to let off the superfluous water; and much yet remains to be done, owing to the small number, and size of the streams, seeking for an outlet, and finding but few.

The southern boundary of this division is not so distinctly marked towards the eastern, as it is at the western extremity. At Williamston, on the Niagara river, and at Lockport, the mountain ridge is probably a hundred and fifty or two hundred feet in height, presenting to the eye the appearance of a bluff. Travelling east from thence, its relative altitude becomes gradually less conspicuous, until at length it is difficult for a casual observer to distinguish the line of separation.

But the most important portion of the state is the one which remains to be considered, whether we regard its extent, its fertility, its population or resources. The other districts are deservedly thought to be fertile, and would be eminently entitled to that character if they were situated on the eastern side of the mountains; but this far transcends them in every natural advantage. After ascending the mountain ridge, a vast table land stretches to the south, high, dry, and gently undulating, and possessing a climate remarkable for its salubrity. This is the limestone region of the state; and it is here that the beautiful and picturesque lakes are found, which form so unique a feature in the geographical history of New York. The lime-stone overlies the red sand-stone to the

depth of perhaps five or six hundred feet; and in many places the soil is covered with broken fragments of the same, mixed with boulders of different varieties of granite. Where these occur in considerable numbers, it requires great labor to subdue the land and prepare it for cultivation; but they are not considered such a serious objection as one might suppose, who has not been accustomed to them. They furnish materials for building houses and making enclosures; the latter of which, when put up with skill, require but little trouble to be kept in repair. This, however, is but a small portion of the service they have performed; exposed, for ages, to the action of the elements, they have become obviously disintegrated, and have afforded such an abundant supply of lime to the soil, that it may truly be said to be inexhaustible. So great is the amount of calcareous matter it contains, particularly a few inches below the surface, that a brisk effervescence ensues when mixed with acids. I would not wish, however, to be understood to say that this is uniformly the case; but the quality of the land is apparently so near the same, and the disjointed limestone is distributed so regularly over the surface, that I can only regard the absence of an equal proportion of the carbonate of lime, as an occasional exception of the fact I have stated. When we add to the knowledge of this fact, that there is never any parching of the earth by drought, as is often the case in more southern latitudes, it can no longer be a matter of surprise that the crops are so abundant, or that the farmers of N. York, on tracts of land from 100 to 150 acres in extent, should grow rich by cultivation of the soil. Of their system of agriculture I shall speak in the proper place.

The lakes, I have said, form a remarkable feature in the geography of the state. They lie parallel to each other, extending from south to north; and every great natural valley is a reservoir for the waters of the neighboring streams. They are of very unequal elevation; the surface of the Cayuga, for instance, being forty feet lower than that of the Seneca, lying by its side, not more than twenty miles distant. This is obvious from the fact, that the outlet from the Seneca empties into the lower end of the Cayuga; and along its margin there is water power to considerable extent. The deepest part of Cayuga lake is about two hundred and fifty feet, which renders it probable that the red sandstone forms the basin of these interior lakes, as well as those of Ontario and Erie. Near the extremities, however, the depth is not so great. They were formerly inhabited by shell fish in large numbers, as is evident from the extensive bed of marl found at the lower end of the Cayuga. It is very pure, and of such whiteness that it was formerly used for whitewashing the farm-houses; but it is latterly substituted by stone lime. No use has been made of it for agricultural purposes.

These lakes, besides affording great facilities for intercommunication, agreeably diversify the country, and render it doubly charming to the lover of the picturesque. They are frequently seen by the traveller for miles before he reaches them; and in connection with the country lying in the distance on the opposite side, they furnish landscapes truly enchanting. Perhaps I could not convey a better idea of the beauty and situa-

tion of the country, than by briefly describing one of these landscapes. It was on a delightful afternoon in the month of August, when I approached the west bank of the Cayuga lake, with the intention of crossing over in the little steamer, which incessantly plies from one side to the other, a distance of three miles. Being detained longer than I expected, I had a favorable opportunity of contemplating the scene before me. The transparent sheet of water stretched far to the south, and on its unruffled bosom lay the little craft, without a breath of air to move them; the opposite shore was sprinkled with numerous villages, whose white houses glittered in the soft rays of the evening sun; while beyond, in the background, the country rose from the water, for five or six miles, at a regular slope of a hundred feet to the mile, showing to infinite advantage the numberless small farms and neat farm houses, like patches in the distance. It was altogether unrivalled by any thing I had ever seen, though I had scaled the summit of the Peaks of Otter for the purpose of having a view of the surrounding country, and had gazed with delight from the brow of Laurel Hill, which overlooks the western part of Pennsylvania.

In describing a country, it is proper to say something of the natural growth of the soil, as it is considered an indication of its quality. The forests of New York are extremely dense, and remarkable for the size, and particularly for the height of the trees. In summer their foliage presents a shield through which the sun can seldom penetrate. The most magnificent production is undoubtedly the American elm, (*ulmus Americana*); and the *u. racemosa*, a species peculiar to that locality, is scarcely inferior to it. The sugar maple and black maple—the tulip tree or poplar of the south, (*liriodendron*)—the basswood (*tilia glabra*)—the beech and the two species of walnut—are the fit companions of the elm. Besides these, there are many of the second class, among which may be enumerated the cucumber tree, (*magnolia acuminata*), the white and black ash, the cotton wood, (*populus angolata*), and several species of oaks. I was rather mortified to see these monarchs of our southern forests hiding their diminished heads beneath the elm and the maple. The soil is doubtless less congenial to the oaks than it is to the south, which are scrubby and stunted in comparison with the size they attain in Virginia. The species are, moreover, limited to a small number. The pines are only occasionally seen in the western part of New York; and when they do occur, it is in sandy districts of limited extent, between the limestone land and the lake. The white pine (*pinus strobus*) is the most majestic, as well as the most valuable. The hemlock, (*pinus canadensis*)—the Norway pine, (*p. resinosa*)—the hack-match, (*p. pendula*), and some inferior species, together with the arbor vitae, (*thuja occidentalis*), grow in the same localities.

The extreme luxuriance of the deciduous forests on a highly calcareous soil, struck me as being incompatible with the theory of an ingenious and distinguished writer, published in a former volume of the Farmer's Register. In treating of the origin of the western prairies, he endeavored to sustain the position, that the presence of carbonate of lime was unfriendly to the growth



of timber. If the position was assumed without any qualification, the facts I have stated must go to invalidate it; but if he had reference only to the oaks, which constitute the principal growth among the prairies, the limited number and small size of those growing on the limestone soils of New York may necessarily tend to support it. Besides, there are many hardy southern plants, as I was informed, which will not flourish, or even grow, in the calcareous soils of that state. I regret that I cannot now enumerate them.\*

I should not omit to state that the precipitous banks of the Niagara river afford an interesting and imposing view of the geological structure of the contiguous country. In the immense chasm which the current has worked out, we have almost at a glance of the eye, a sight of the different rocks which are found in the western part of the state. The strata are disposed so nearly horizontally, that we must suppose the elements to have been in a state of almost entire quiescence during their deposition. There is, however, a gradual dip to the south, which becomes apparent in ascending the river. Beginning at the base of the mountain ridge, the red sandstone forms the substratum, which is distinctly visible for two or three miles up the river. Overlying this, and commencing at the mountain ridge, is the common limestone, rising suddenly to the height of some two hundred feet. Ascending the river some miles, this deposit gradually sinks, and another of the fossil limestone commences, and continues with equal regularity. At the falls, which are seven miles from the mountain ridge, this is the only rock to be seen, which in its turn is overlaid by the hornstone or corniferous limestone, upon which the waters of the Niagara flow, after being discharged from Lake Erie. If, therefore, as some writers suppose, the falls are gradually receding, the hornstone will offer a barrier at which their progress will be arrested, and which they can never by possibility overcome.

Having dwelt, perhaps too long, on subjects of a general character, I shall defer, until another month, the remarks I propose to offer on other matters.

[To be continued.]

"The position assumed in the 'Essay on the formation of prairies,' (p. 321, vol. iii.) which is referred to above, was not meant or stated as unqualified, or universally true. The writer believed, indeed, that a calcareous soil was less favorable to the growth of most forest trees, than a soil not calcareous. To some kinds, (as specified above by our correspondent,) such constitution of soil may be positively as well as comparatively unfavorable—and to others, as of the most usual kinds and numerous pines, a calcareous soil is altogether inhospitable, and seldom permits a single tree to live. On the other hand, some trees thrive best on soil containing mild calcareous earth, and will hardly live where that ingredient is altogether deficient, and greatly wanting to the constitution of the soil; of these, the common locust, (*robinia pseudacacia*), is the most striking example.

But the mode in which the calcareous quality of soils was supposed (in the theory of the formation of the prairies) to prevent the growth or continuance of trees in general, was not only, nor

principally, by being directly unfavorable—but indirectly, by favoring, in a much greater degree, the growth of rank grass, which furnished every winter more and more fuel to the fires, as the trees more and more gave way to their effects, and to the more vigorous and increasing growth of grass.

ED. FAR. REGISTER.

[From the Indiana Farmer.]

#### DURHAM CATTLE.

It is a matter of surprise, even to some of our agricultural friends, how this improved breed of cattle, can be worth the high prices they are bringing throughout our country.

There are many reasons for this. First, they grow larger than our common cattle. Secondly—Their flesh grows more abundantly in those parts where it is considered most superior.—Thirdly—They fatten more easily than the ordinary kinds. Fourthly—Cows of this blood, give more milk—and some think of a better quality. Fifthly—This stock arrives at maturity much earlier than the common cattle of our country.

It has been often remarked that if all the grain and hay an ox or cow of the common breeds eats, before they arrive at maturity, were weighed, and measured, and sold, that it would amount to more than the animal would sell for, to say nothing about the time spent in feeding, or, the amount of pasturage. We have no doubt that the way cattle have been managed, generally, in this state, this remark would hold good. This, then, renders it important, that every effort should be made by our stock raisers, to economize, by the preparation of food, especially, in this country, where such beautiful crops of roots may be produced, and where so much, that may, with a little attention and preparation, be converted into fodder, is suffered to stand in our fields and go to waste.—But, more especially, would it be to their advantage as soon as possible to get into a breed of cattle, that will come to maturity earlier than those they now have.

On this account, perhaps, arises the profit from the Durham Cattle, more than from any other cause. They are said to come to maturity from two to three years earlier than our scrub cattle. This, we have no doubt is the fact, when they are well attended to, and the common breed receive only ordinary attention. But there is no doubt, with the same care, the expense of feeding one or two winters may be saved by our farmers, if they will procure the Durham Cattle, which together with the profits arising from the other superior qualities they possess, will make the stock raising business, in this state, so peculiarly adapted to that branch of husbandry, a most lucrative business.

#### SEED CORN.

The address of Mr. Lewis, which we published last week, contains the following excellent recommendation, founded on an established truth of nature. We place it again before our readers in a separate paragraph, believing its benefit will thus be made more available to a larger number of farmers.—*Frank Farmer.*

"Our corn crops, are not by half so great on a given quantity of land as they should be—as

they would be from seed carefully selected and combined, and separately cultivated. The separate cultivation of the many eared Maryland corn, I conceive, promises great advantages. Corn planted at a greater distance and with fewer stalks in the hill, tends to produce more ears. That tendency should be kept up and increased by separate and distinct cultivation of corn for seed every year. Seed taken from the great body of the crop, planted closely to produce as much as the land will bear, although the ears may be large, tends to produce fewer ears on the stalk."

#### TRY THE NEW ESTABLISHMENT.

##### NO MISTAKE

Every article warranted. 500 Ploughs, right and left hand, from \$4 to \$20. Also the Hill-side Plough, well adapted to turn down hill. Wheat Fans warranted to take garlic from all kinds wheat. Cutting Boxes for straw, corn fodder, &c. at low prices. Corn-shellers, of different sizes and patterns, \$15 to \$30. Castings by lb. or ton, to suit ploughs or machinery. All repairs in our line executed with durability, neatness and despatch.

Also, Cline's combined Plough.

J. T. DURDING.

de 12

#### GEESE AND TURKEYS.

The subscriber has for sale a few pair of these beautiful white Turkeys, so highly esteemed for sporting gentlemen's lawns. Also the large Westphalian Geese, from Richd. Barnett's stock, BOTH PURE WHITE.

oc 17 5t

ROBERT SINCLAIR, sen.

#### ROBERT SINCLAIR'S NURSERY,

AT CLAREMONT, NEAR BALTIMORE.



This Establishment now comprises between 20 and 30 acres, closely planted with a most

##### CHOICE COLLECTION,

from our and foreign countries of the FINEST VARIETIES known

—Of Pear, Plum, Cherry, Peach, Apple, Quince, Apricot, Nectarine, Grape Vines, Currant, English Gooseberry, Raspberry, Strawberry, English Walnut, Ornamental Trees, including Evergreens, Shrubs and Roses, all very thrifty and of larger size than any former year, especially the Peach, Apple, and Trees suitable for planting in streets.

Also, about half an acre of double Dahlias, now in full bloom, of almost every color and shade. Amateurs are invited to make their selections.

20,000 Morus Multicaulis Mulberry Trees, with large roots, 2 to 7 feet high, at liberal prices, varying according to size.

60,000 Cuttings of do. well ripened wood.

20,000 white Italian Mulberry Trees, 2 years old.

For further information please address the proprietor, near Baltimore. Trees and Plants ordered from him are carefully selected and faithfully packed, and forwarded by land or sea, as directed, and conveyed to the city without charge. Printed and priced catalogues will be sent on application gratis.

R. Sinclair, Jr. & Co., Seedsmen, in Light st., act as agents, where necessary.

oc 17 5t

ROBERT SINCLAIR, sen.

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The advantages of the morus multicaulis over the morus alba compared—coal ashes as a manure—silk culture in Massachusetts—Gov. Ritner's recommendation of the silk culture—weighing of live stock in Baltimore; memorial to the legislature on the subject—interesting communication on the subject of Baden corn—quantity of Flour consumed in the United States—sugar beet seed—weight of Mr. Scott's Durham cattle—large agricultural products—crop of apples in Canada—comparative value of the horse and ox—interesting account of the soils and agriculture of western New York—Durham cattle—seed corn—advertisements—prices current.

## BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,.....	bushel	1 25	
CATTLE, on the hoof,.....	100lbs	6 00	7 00
CORN, yellow.....	bushel	76	78
White.....	"	75	78
COTTON, Virginia,.....	pound	11	
North Carolina,.....	"		
Upland,.....	"	10	2
Louisiana—Alabama.....	"		5
FEATHERS,.....	pound	50	
FLASHED,.....	bushel	1 37	1 50
Flour & MEAL—Best wh. wh't fam.....	barrel	11 00	12 00
Do. do. baker's.....	"		
Superior, st. from store.....	"	9 25	9 50
" wagon price,.....	"	9 00	
City Mills, super.....	"	9 25	9 50
" extra.....	"	9 75	
Susquehanna,.....	"		
Rye,.....	"	6 50	
Kitt-dried Meal, in hhds.....	hhd.	23 50	24 00
do. in bbls.....	bbl.	5 00	5 25
GRASS SEEDS, wholes. red Clover,.....	bushel	5 50	6 00
Kentucky blue.....	"	2 50	3 00
Timothy (herds of the north).....	"	3 50	4 00
Orchard,.....	"	2 50	3 00
Tall meadow Oat,.....	"		3 00
Hays, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	12 00	15 00
HEN, country, raw dotted,.....	pound	6	7
" water rotted,.....	"	7	8
HENS, on the hoof,.....	100lb.	6 25	6 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound	9	
second,.....	"	7	
refuse,.....	"	5	
LIME,.....	bushel	32	35
MUSTARD SEED, Domestic, —; blk. ....	"	3 50	4 00
OATS,.....	"	37	38
PEAS, red eye,.....	bushel		
Black eye,.....	"	75	1 00
Lady,.....	"	1 00	
PLASTER PARIS, in the stone, cargo,.....	ton.		3 50
Ground,.....	barrel	1 00	
PALMA CHRISTA BEAN,.....	bushel		
RICE,.....	pound	3	4
RYE,.....	bushel	90	
Susquehanna,.....	"		none
TOBACCO, crop, common,.....	100 lbs	2 50	3 50
" brown and red,.....	"	4 00	6 00
" fine red,.....	"	8 00	10 00
" wrappery, suitable.....	"		
for cigars,.....	"	10 00	20 00
" yellow and red,.....	"	8 00	10 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"		
ground leaf,.....	"		
Virginia,.....	"	4 50	9 00
Rappahannock,.....	"		
Kentucky,.....	"	4 00	8 00
WHEAT, white,.....	bushel	2 00	2 10
Red, best.....	"	1 85	1 95
Maryland inferior.....	"	1 68	1 85
WHISKY, 1st pf. in bbls.....	gallon	43	44
" in hhds.....	"	42	42 1/2
" wagon price,.....	"	42	39
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	
To Wheeling,.....	"	1 75	
WOOL, Prime & Saxon Fleeces,.....	pound	40 to 50	20 22
Full Merino,.....	"	35	40 18 20
Three fourths Merino,.....	"	30	35 18 20
One half do.....	"	25	30 18 20
Common & one fourth Meri.....	"	25	30 18 20
Pulled,.....	"	28	30 18 20

## MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD F. ROBERTS.

Baltimore Md.

## BALTIMORE PROVISION MARKET.

	PER	FROM	TO
APPLES,.....	barrel		
BACON, hams, new, Balt. cured.....	pound.	13	13
Shoulders,..... do.....	"	10 1/2	10 1/2
Middlings,..... do.....	"	do	do
Assorted, country,.....	"	9	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"		
CIDER,.....	barrel		
Calves, three to six weeks old.....	each.	5 00	6 00
COWS, new milch,.....	"	25 00	40 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 87	
CHOP RYE,.....	"	1 75	
EGGS,.....	dozen.	18	
FISH, Shad, No. 1, Susquehanna,.....	barrel.	6 75	
No. 2,.....	"	6 50	
Herrings, salted, No. 1,.....	"	2 75	2 87
Mackerel, No. 1,..... No. 2.....	"	9 00	10 00
No. 3,.....	"	4 75	
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	9	10

## BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do		Farmers Bank of Virg. 1 1/2 1/2
Other Branches,.....	do		Bank of Virginia,..... do
MARYLAND.			Branch at Fredericksburg, do
Banks in Baltimore,.....	par		Petersburg,..... 1/2
Hagerstown,.....	1/2		Norfolk,..... 1 1/2 1/2
Frederick,.....	do		Winchester,..... 1/2
Westminster,.....	do		Lynchburg,..... 1 1/2 1/2
Farmers' Bank of Mary'd, do			Danville,..... 3/4
Do. payable at Easton,....	1		Bank of the Valley,.... 1/2
Salisbury,..... 2 per ct. dis.			Branch at Romney,.... do
Cumberland,..... 3			Do. Charlestown,.... do
Millington,..... do			Do. Leesburg,.... 1/2
DISTRICT.			Wheeling Banks,.... 3/4 1/2
Washington,.....			Ohio Banks, generally 6 1/2
Georgetown, } Banks, 1/2 p.c.			New Jersey Banks gen. 5
Alexandria, }			New York City,..... 1/2
PENNSYLVANIA.			New York State,.... 3/4
Philadelphia,.....	1/2		Massachusetts,..... 3/4 1/2
Chambersburg,.....	1		Connecticut,..... 3/4 1/2
Gettysburg,.....	do		New Hampshire,.... 3/4 1/2
Pittsburg,.....	3/4		Maine,..... 3/4 1/2
York,.....	1		Rhode Island,.... 3/4 1/2
Other Pennsylvania Bks. 4			North Carolina,.... 5
Delaware (under \$5).....	6		South Carolina,.... 8 1/2
Do. (over 5).....	2		Georgia,..... do
Michigan Banks,.....	10		New Orleans,..... 12
Canadian do.....	10		

## THE GENUINE MORUS MULTICAULIS, AND GRAPE VINES.

The undersigned having a disposable stock of the genuine Morus Multicaulis, will sell at the following prices—For rooted plants, as of layers one foot and upwards high, to trees of 8 and 9 feet, from 10 to 30 dollars per hundred; and the cuttings from 10 to 40 dollars per thousand, as they may have 1, 2, 3 or 4 buds each, or at the rate of one cent a bud, in cuttings or limbs uncut, as may suit purchasers. The above stock of some hundred trees and several thousand cuttings, together with a large number of rooted Grape Vines at 20 dollars per hundred of kinds most select for American culture, to be engaged according to priority of application, made to the subscriber (if by letter) as postmaster at Brinkleyville, Halifax Co. N. Carolina.

SYDNEY WELLER.

Nov. 9, 1887—21

## A DURHAM BULL FOR SALE.

UNCAS, a beautiful white Bull of the improved Durham short-horn breed, 3 years old, will be sold a bargain, \$250, as his owner, desirous of changing his cross-bought another bull at the sale of Mr. Whittaker's stock. Uncas has a pedigree tracing to the herd-book, and will be warranted pure.

Applications by letter to be post-paid. Address

29

EDWD. P. ROBERTS, Baltimore, Md.

## FARMERS' REPOSITORY,

PRATT STREET,

Between Charles &amp; Hanover sts. Baltimore, Md.

During the last four years the Proprietor has erected two extensive Establishments for the manufacture of Agricultural Implements generally, including an extensive Iron Foundry, Trip Hammer, &c. With these facilities, and the most experienced workmen, (many of whom have been several years in his employ,) and the best materials, he flatters himself that he will continue to give general satisfaction to his customers, his object is to confine himself to useful implements, and to have them made in the best possible manner and on reasonable terms.

The following are some of the leading articles now on hand, viz. his own Patented Cylindrical Straw Cutters, of various sizes and prices—these machines have never been equalled by a similar machine in any part of the world.

Corn and Tobacco Cultivators

Superior Grain Cradles

Weldron Grain and Grass

Scythes

Farwell's Patent Double

Back Grass Scythes and

Snathes

Hay Forks and Rakes

Manure Forks, Shovels, &c.

English Corn Hoes

Superior American made

Castel Hoes, with handles

Wheat FANS, of various

sizes

Mattocks, Picks and Grub-

bing Hoes

Corn Shellers

All kinds of Grass SEEDS and Seed Grain bought and

sold by him, and particular attention paid to their quality.

Likewise constantly on hand a general assortment of

Mr. D. Landreth's superior GARDEN SEEDS, raised

by himself, and warranted genuine. All communications

by mail, post paid, will receive prompt attention.

J. S. EASTMAN.

17 4

## MULBERRY TREES.

75,000 Chinese Morus Multicaulis, all on their own bottoms, of various sizes, from one to six feet, at the lowest prices. The wood is well matured and very perfect, and they have become acclimated, by successive propagation in a most exposed location—Prepared Cuttings will be supplied at the lowest rates.

3,000 hybrid short jointed Mulberry, with large leaves, very hardy and on their own bottoms—5 to 6 ft. in height.

20,000 Chinese Morus expanse, with large smooth glossy leaves, very succulent and nutritious, and greatly loved by the worm. This is a most valuable variety for the North, being very hardy, and none more highly esteemed in France. They are engrafted on the white mulberry, which increases their hardiness, and are 5 to 7 feet in height. This is the only engrafted kind.

3,000 Dandolo or Mozettiana Mulberry, 1 and 2 years old from seed, a most excellent variety, with large leaves and very hardy.

10,000 Brusa Mulberry, very hardy.

25,000 Florence Mulberry, leaves nearly entire.

30,000 white Mulberry, 1 to 2 years old.

65 lbs. white Italian Mulberry Seed.

750 lbs. white and yellow Sugar Beet Seed.

Priced catalogues of the above, and of Fruit and

Ornamental Trees, Green House plants, Bulbous Flower

Roots, splendid Dahlias, and Garden, Agricultural and

Flower Seeds, sent gratis to every applicant. Orders

sent per mail will meet prompt attention, and the trees

be packed carefully and forwarded as desired. Companies

or individuals desirous to contract for large numbers

of trees will be dealt with on the most liberal terms.

WM. PRINCE & SON.

New York, Nov. 22—28.

The office of the "Farmer and Gardener"

is removed to the cor. Baltimore & North sts.